

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A JPEG2000 coding apparatus for generating JPEG2000 file comprising:
 - a JPEG2000 coder which codes an image data to convert it to JPEG2000 file;
 - an area discriminator which discriminates an area defined by each object contained in said image data and specifies type of the object;
 - an XML data producer which performs character recognition processing on the area discriminated as that containing a character by said area discriminator to produce a text data and produces an XML data corresponding to said text data; and
 - an XML box adder which positions an XML box that has stored said XML data produced by said XML data producer ~~can store a specific data~~ into a bit stream constructing said JPEG2000 file, in back of data corresponding to a predetermined resolution and in front of data corresponding to a higher resolution than said predetermined resolution ~~based on a relation to data corresponding to a predetermined level of wavelet decomposition and causes said XML box to store said XML data produced by said XML data producer.~~

2. (Currently Amended) A JPEG2000 decoding apparatus for receiving and decoding a JPEG2000 file produced by said [a] JPEG2000 coding apparatus described in claim 1, the JPEG2000 decoding apparatus comprising:

 a JPEG2000 decoder which decodes JPEG2000 file to convert it to an image data;

a reader which reads an XML data stored in a selector configured to allow a user to select whether to read an XML box added into a bit stream of JPEG2000 file in the middle of JPEG2000 decoding executed by the JPEG2000 decoder; and

 an XML data processor which, when the XML data has been read by said reader, processes the XML data stored in the XML box to acquire a text data.

3-6. (Cancelled)

7. (Currently Amended) A JPEG2000 coding method for generating JPEG2000 file, comprising steps of:

 coding an image data to convert it to JPEG2000 file;

 discriminating an area defined by each object contained in said image data and specifying type of the object;

 performing character recognition processing on the area discriminated as that containing a character to produce a text data and producing an XML data corresponding to said text data; and

 positioning an XML box that has stored said XML data can store a specific data into a bit stream constructing said JPEG2000 file, in back of data corresponding to a predetermined resolution and in front of data corresponding to a

~~higher resolution than said predetermined resolution based on a relation to data corresponding to a predetermined level of wavelet decomposition and causing said XML box to store said XML data.~~

8. (Currently Amended) A JPEG2000 decoding method for receiving and decoding a JPEG2000 file produced using said [a]JPEG2000 coding method described in claim 7, the JPEG2000 decoding method comprising steps of:

decoding JPEG2000 file to convert it to an image data;
~~selecting whether to read reading an XML data stored in an XML box~~
added into a bit stream of JPEG2000 file in the middle of JPEG2000 decoding; and
~~processing the XML data stored in the XML box to acquire a text data.~~

9-10. (Cancelled)

11. (New) The JPEG2000 decoding apparatus of claim 2, further comprising a display for displaying the text data acquired by said XML data processor in the middle of JPEG2000 decoding executed by the JPEG2000 decoder.

12. (New) The JPEG2000 decoding apparatus of claim 2, further comprising a selector configured to allow a user to select whether to read an XML data stored in an XML box added into a bit stream of JPEG2000 file in the middle of JPEG2000 decoding executed by the JPEG2000 decoder;

wherein, when the choice to read the XML data is selected through the selector, the XML data is to be read by the reader.

13. (New) The JPEG2000 decoding apparatus of claim 11, further comprising a selector configured to allow a user to select whether to read an XML data stored in an XML box added into a bit stream of JPEG2000 file in the middle of JPEG2000 decoding executed by the JPEG2000 decoder;

wherein, when the choice to read the XML data is selected through the selector, the XML data is to be read by the reader.

14. (New) The JEPG2000 decoding method of claim 8, further comprising displaying the text data acquired by said XML data processor in the middle of JPEG2000 decoding executed by the JPEG2000 decoder.

15. (New) The JEPG2000 decoding method of claim 8, further comprising allowing a user to select, using a selector, whether to read an XML data stored in an XML box added into a bit stream of JPEG2000 file in the middle of JPEG2000 decoding executed by the JPEG2000 decoder;

wherein, when the choice to read the XML data is selected through the selector, the XML data is read.

16. (New) The JEPG2000 decoding method of claim 14, further comprising allowing a user to select, using a selector, whether to read an XML data stored in an XML box added into a bit stream of JPEG2000 file in the middle of JPEG2000 decoding executed by the JPEG2000 decoder;

wherein, when the choice to read the XML data is selected through the selector, the XML data is read.